

Vermont Mental Health Performance Indicator Project
Agency of Human Services, Department of Health, Division of Mental Health
Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601

MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani
Stephen Morabito

DATE: April 1, 2005

RE: Inpatient Admissions after Emergency Department Care

Patterns of movement among service settings and service sectors provide important measures of service system performance. This movement may involve transition from community settings to inpatient settings and back to the community. This movement may involve a change between private sector and public sector services. This movement may involve mental health service sectors, substance abuse service sectors, medical service sectors, and others.

As part of its work with the Vermont Banking, Insurance, Securities and Health Care Administration (BISHCA) this past fall, the PIP examined patterns of mental health service delivery in general hospital inpatient settings and general hospital emergency departments. This week's PIP examines patterns of movement between these two, closely related, service sectors. Specifically, this PIP examines the rate at which treatment for mental illness (Major Diagnostic Code 19) in a hospital emergency department is followed by an inpatient admission. Research indicates that between 25% and 49% of individuals who are treated for mental illness in a hospital emergency department are also admitted to inpatient hospitalization¹⁻³. These admission rates for emergency department mental health service recipients are substantially higher than the 12% admission rates reported for people with emergency department services for medical problems⁴.

Data used in this analysis were extracted from Vermont's Uniform Hospital Discharge Data Set for calendar years 2001 and 2002. The current analysis focuses on the four Vermont general hospitals with designated inpatient psychiatric units and excludes the nine general hospitals that do not have a designated inpatient psychiatric unit. The hospitals with a designated inpatient psychiatric unit account for 68% of all mental illness related emergency department visits during the study period. In addition to overall inpatient admission rates for the four hospitals, inpatient admission rates were calculated for two groups of emergency department service recipients: those who live within the local Hospital Service Area defined by the Vermont Department of Health, and those who live outside that Hospital Service Area.

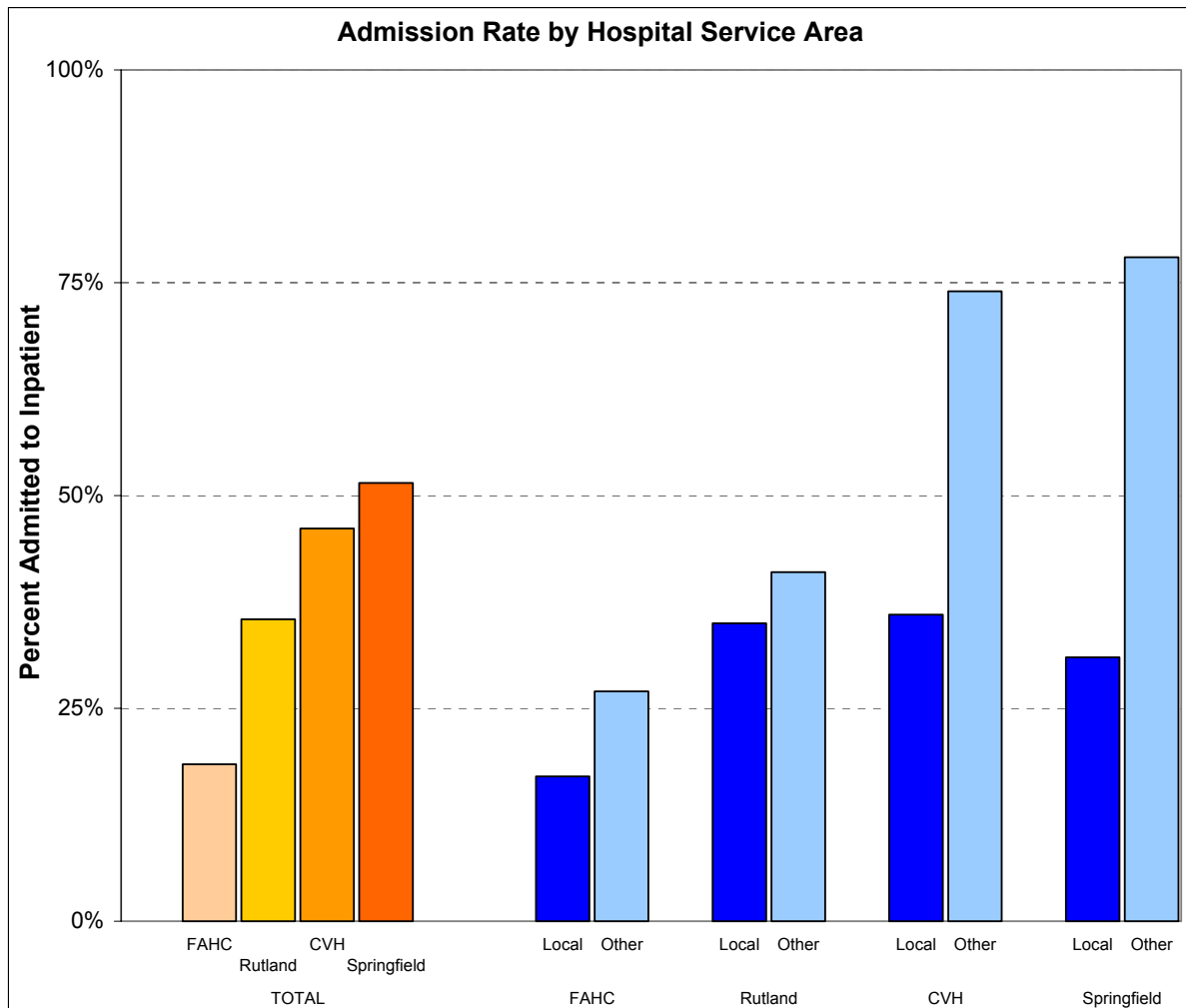
As you will see, about one-third (35%) of mental health related emergency room visits were followed by an inpatient admission. This is near the middle of the range identified in the professional literature. The admission rates for individual hospitals, however, ranged from 18% at Fletcher Allen Medical Center in Burlington, to 51% at Springfield Hospital in Southeastern Vermont. Both of these admission rates lie slightly outside of the range identified in the literature. Inpatient admission rates for Rutland (35%) and Central Vermont (46%) were within the range identified in the literature.

Admission rates for residents of local Hospital Service Areas were lower than admission rates for individuals who lived outside of the local Hospital Service Area for every hospital with a designated inpatient psychiatric unit. At Central Vermont Medical Center and Springfield Hospital, the admission rates for non-local residents were more than twice the admission rates for local residents (74% vs. 36% and 78% vs. 31%, respectively).

As always, we look forward to your interpretation of these findings, your questions, and your suggestions for further analyses of these data to pip@vdh.state.vt.us or 802-241-2638.

-
- 1) Claasen, C.A., Hughes, C.W., Gifillan, S., McIntire, D., Roose, A. et al. (2000) Towards a Redefinition of Psychiatric Emergency. *Health Services Research*, 35:735.
 - 2) Breslow, R.E., Erickson, B.J. and Cavanaugh, K.C. (2000). "The Psychiatric Emergency Service: Where We've Been and Where We're Going," *Psychiatric Quarterly*, 71:101-121.
 - 3) Sales, G.N. (1991). A Comparison of Referrals by Police and Other Sources to a Psychiatric Emergency Service. *Hospital and Community Psychiatry*. 42: 950.
 - 4) McCaig, L.F. and Burt, C.W. (2004). National Hospital Ambulatory Medical Care Survey: 2002 Emergency Department Summary, Advance Data from vital and health statistics No. 340. Hyattsville, Md.: National Center for Health Statistics.

Inpatient Admission Rates Following Emergency Department Visits for Psychiatric Care at Designated Hospitals: Vermont CY2001-2002



	Total	Fletcher Allen	Rutland	Central Vermont	Springfield
Total					
# of ED Visits	6,462	2,242	1,531	1,788	901
% Admitted	35%	18%	35%	46%	51%
Local Residents*					
# of ED Visits	5,002	1,836	1,340	1,325	501
% Admitted	28%	17%	35%	36%	31%
Others*					
# of ED Visits	1,460	406	191	463	400
% Admitted	58%	27%	41%	74%	78%

***"Local residents" include individuals living within each institution's Hospital Service Area defined by the Vermont Department of Health. "Others" include individuals living outside of each institution's Hospital Service Area.

Analyses are based on the Vermont Uniform Hospital Discharge Data Set supplied by the Vermont Association of Hospitals and Health Systems-Network Services Organization and the Vermont Department of Banking, Insurance, Securities and Health Care Administration. These organizations disclaim responsibility for analyses, interpretations and conclusions, and BISHCA disclaims responsibility for errors in the data.